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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,022	07/03/2002	Francois Girard	0502-1003	4939

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EXAMINER

BENENSON, BORIS

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.







***Detailed Actions***

1. Amendment received on 2/28/2005 is entered.

Claims 1-3 and 11-13 are cancelled.

Claims 4-10 are pending in the Application.

Previously indicated allowability of Claims 4-10 is reconsidered.

Finality of previous Action is withdrawn.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4-5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fussell (4,023,071) in view of Vermij (4,703,299). Fussell disclosed a Transient and Surge Protection Apparatus comprising at least two protection elements a varistor (Fig.3, Pos. 30) and a zener diode (40) which are arranged in parallel and have one of their common connection terminals



Art Unit: 2836

connected to a protected line (L1 or L2) and the other common terminal connected to a common conductor (N) or the ground (Fig.2). Fussell didn't disclose a type of housing and a shape of connecting terminals. Vermij teaches a High Current Interrupting Fuse with ARC Quenching Means. Vermij teaches, "high current interruption capacity fuses commonly have a fuse element electrically connected between two cylindrical end cap terminals fitted over the ends of a sand-filled cylindrical envelope" (Col.1, Lines 10-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the protection device of Fussell with teachings of Vermij and encapsulate the device into cylindrical envelope with end cap terminals, because such device will fit to widely available standard type fuse holder.

3. Claims 6-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fussell (4,023,071) in view of Vermij (4,703,299) as applied to claim 4 above, and further in view of Girard (5,831,808) and Turolla et al. (4,646,037). Fussell in view of Vermij disclose all the elements of Claim 4, but don't disclose a varistor having shape of a tube and disposed around the Zener diode lightning arrester with a longitudinal axis of the tube merges with a longitudinal axis of the cylindrical envelope. Turolla et al. teach a Filter Contact and Its Use in



Art Unit: 2836

Electric Connectors, wherein a varistor (Fig.1, Pos. 10) has the shape of a tube and a inner and outer surfaces of the varistor are respectively in contact with inner metal tube (11) and outer metal tube (1) which form electrodes of the varistor. Girard teaches a Lighting Arrester Device wherein a Zener diode (Fig. 2, Pos. 13) is located symmetrically inside a cylindrical housing (7) and a space inside the housing "is filled with solid resin (Col.5, Line 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Fussell in view of Vermij and use the tube shaped varistor of Turolla et al. and insert the Zener diode of Vermij inside this tube shaped varistor, because it allow better utilize a space inside the envelope of Vermij.

***Allowable Subject Matter***

4. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**The following is an examiner's statement of reasons for allowance:**

5. Claim 8 is allowable because none of the prior art of record disclose a device for protection against voltage surges



Art Unit: 2836

wherein a connection between one of metal rings and outer tube is ensured by welding spots that adapted to under effect of voltage surge to perform a function of a disconnecter in combination with the other claim limitations.

### **Contact information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Benenson whose telephone number is (571) 272-2048. The examiner can normally be reached on M-F (8:20-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2800 ext 36. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



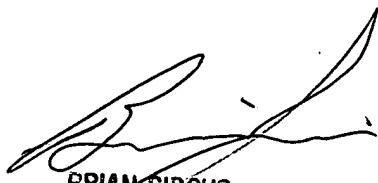
Application/Control Number: 10/088,022

Page 6

Art Unit: 2836

Boris Benenson  
Examiner  
Art Unit 2836

B.B.



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